

Application Serial Number 10/587223
Response to Office Action dated 09/11/2007

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks.

The figure 17 has been amended to be indicated as prior art.

Claim 1 has been amended to remove the informality and clarify that the reactor vessel in the present invention is a closed system having a lid and that the gas is provided directly from the gas supplying device to the gas inlet of the reactor vessel (see Figs. 1-4).

Claim 7 has been amended editorially.

Claim 22 has been amended editorially.

Claims 39 – 63 remain withdrawn with traverse; Applicants retain the right to reinstatement of the claims.

Applicants appreciate the courtesy shown by the Examiner in discussing this application with the undersigned confirmation on December 6, 2007. The discussion of the interview is reflected in the remarks that follow.

Claims 1-3, 23, 35-37 have been rejected under 35 U.S.C. 102 (e) as being anticipated by Kitaoka et al. (US Patent No. 7,221,037). Applicants respectfully traverse this rejection.

Claim 1 requires a reactor vessel having a main body, a lid, a gas inlet and a gas outlet and the direct connection between the gas supplying device and the reactor vessel. This provides a closed reactor vessel and avoids mixing of impurities into gas introduced into the reactor vessel (see page 4, lines 20 -27). Kitaoka discloses a reactor vessel having no lid. In Kitaoka, the reactor vessel is exposed openly to gas in the pressure-resistant vessel (see col. 7, lines 37-67 and Fig. 4). Therefore, claims 1-3, 23, 35-37 are not anticipated by Kitaoka.

Claims 4 and 5 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka, et al. (US Patent No. 7,221,037) in view of Porowski et al. (US Patent No. 5,637,531). Applicants respectfully traverse this rejection.

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Even if Porowski discloses an apparatus having a gas inlet and a gas outlet that are adjacent to one another as shown in Fig. 1, such reference does not disclose an apparatus using a reactor vessel having a lid. In Porowski, the inside of the reactor vessel is exposed openly to a high-pressure gas supplied to the pressure-resistant outer vessel, and the gas supplied through the pressure-resistant vessel is used for the reaction (see Fig. 1). Therefore, the reference does not disclose a reactor vessel having a lid as required in claim 1. Accordingly, the present invention is distinguishable from the reference. Therefore, claims 4 and 5 are allowable at least for the same reasons as claim 1.

Claims 6-8 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka, et al. (US Patent No. 7,221,037) in view of Schowalter et al. (US Patent No. 6,770,135). Applicants respectfully traverse this rejection. Schowalter does not remedy the deficiencies of Kitaoka noted above. Applicants do not concede the correctness of the rejection for claims 6-8.

Claims 9-12 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka, et al. (US Patent No. 7,221,037) in view of Motakef et al. (US Patent No. 7,052,546). Applicants respectfully traverse this rejection. Motakef does not remedy the deficiencies of Kitaoka noted above. Applicants do not concede the correctness of the rejection for claims 9-12.

Claims 14-15 and 22 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka et al. (US Patent No. 7,221,037). Applicants respectfully traverse this rejection. These claims are allowable over Kitaoka at least for the same reasons as claim 1. Applicants are not conceding the correctness of the rejection.

Claims 16 has been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka et al. (US Patent No. 7,221,037) in view of Liu (US Patent Application Publication No. 2005/0011436). Applicants respectfully traverse this rejection. Liu does not remedy the deficiencies of Kitaoka noted above. Applicants do not concede the correctness of the rejection for claim 16.

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Claims 25-27 and 29-33 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka et al. (US Patent No. 7,221,037) in view of Suscavage et al. (US Patent No. 6,676,752). Applicants respectfully traverse this rejection. Suscavage does not remedy the deficiencies of Kitaoka noted above. Applicants do not concede the correctness of the rejection for claims 25-27 and 29-33.

Claims 28 has been rejected under 35 U.S. 103 (a) as being unpatentable over Kitaoka et al. (US Patent No. 7,221,037) in view of Das et al. (US Patent No. 7,022,378). Applicants respectfully traverse this rejection. Das does not remedy the deficiencies of Kitaoka noted above. Applicants do not concede the correctness of the rejection for claim 28.

Claims 38 has been rejected under 35 U.S.C. 103 (a) as being unpatentable over Kitaoka et al. (US Patent No. 7,221,037) in view of Suscavage et al. (US Patent No. 6,676,752) and in further view of Das et al. (US Patent No. 7,022,378). Applicants respectfully traverse this rejection. Suscavage and Das do not remedy the deficiencies of Kitaoka noted above. Applicants do not concede the correctness of the rejection for claim 38.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.



Dated: December 11, 2007

Respectfully submitted,

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